## ART. IX.—Remarks on the Early History of the Brennan Torpedo.

By Professor Kernot, M.A., C.E.

[See Proceedings.]

ART. X.—Notes on Some Determinations of Chlorine in the Water of the Yarra.

By C. R. Blackett, F.C.S.

[Read August 11, 1887.]

The opening of the Fisherman's-bend Canal, in accordance with Sir J. Coode's plan, would seem to have caused a great change in the character of the water in the Yarra-river. In 1884, Mr. Newbery made some determinations of the amount of chlorine in the water. The quantity has much increased even on the surface, but at the bottom it is now as fully charged with salt as the water of Hobson's Bay on the surface at low tide, or indeed more so.

There are several points of interest in considering the differing amounts of chlorine at high and low tide; it would seem to conclusively prove that the heavy tidal water slowly creeps up at the bottom of the stream, and that the fresh water coming down the river floats more or less upon the surface, unless when there is a vigorous churning-up by the numerous steamers which are constantly during the day moving to and fro. At the time when my samples were taken, the river was unusually still and free from traffic.

Another point arrests attention, and that is the very rapid way in which the amount of salt decreases as we ascend the